

## CHAPTER III METHODOLOGY OF THE RESEARCH

### A. The Research Design

In this research, the research design that a field in this research is descriptive quantitative to find out whether using authentic materials can influence the students' reading comprehension, students was given reading test and questionnaire. Then analyzed data to find out whether there was an influence of using authentic materials toward students' reading comprehension.

### B. Location and Duration of the Research

This research conducted in MA DDI Kanang by focusing at the second grade at the school. The researcher took one month for doing this research.

### C. Population and Sample

#### 1. Population

The population is “the whole of the object of research which can be human, animal, plant, air, symptom, value, events, attitude of life, etc”. So this object can be the source of research data<sup>1</sup>. The population of this research is the second grade students of MA DDI Kanang, which consist of four classes. They are XI IPA 1, XI IPA 2, XI IPA 3, and XI IPA 4. The total of the eighth grade students is 136 people.

Table 3.1: The Total of the Second Grade Students of MA DDI Kanang School Year 2019/2020

NUMBER	CLASS	TOTAL
1	XI IPA 1	33

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<sup>1</sup>Burhan Bungin, *Metodologi Penelitian Kuantitatif: Komunik.*

NUMBER	CLASS	TOTAL
2	XI IPA 2	34
3	XI IPA 3	35
4	XI IPA 4	34
TOTAL		136

## 2. Sample

Sample as defined as a number of members selected from the population.<sup>2</sup> According to Sugiyono, the sample that is taken from population must be representative.<sup>3</sup> The writer used simple random sampling technique to determine the sample. Random sampling also referred to as judgement sampling, is the process of selecting a sample that is believed to be representative of given population. The researcher was took some students in some class randomly.

### D. Instrument of the Research

The instrument was use reading test as the instrument of the researcher to measure the reading comprehension of students. The essay test consist of 10 numbers, the score will different each number based on the difficulty level and also the researcher used questionnaire in this research to know how students' interest when they using authentic material in their lesson.

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<sup>2</sup>Juliansyah Noor, *Metodologi Penelitian Skripsi, Tesis, Disertasi & Karya Ilmiah* (Prenada Media).

<sup>3</sup>Sugiyono, *Statistika Untuk Peneliti*, (Bandung: Alfabeta, 2010), p.62.

### E. Procedure of the Collecting Data

According to Hornby, test is an examination or trial to find its quality, value, composition etc. He also pointed out the other fields in test are knowledge, proficiency, comprehension, and understanding about the subject matter. Therefore, appropriate test is very crucial in process collecting data because there are many sub fields involved.<sup>4</sup>

In this research, the researcher have shared the test in the form of essay questions and questionnaire by creating a google form and distributed to the students via online.

### F. Technique of Data Analysis

The data is collected through the text the researcher used the scoring system below to find out the students ability in writing a good essay after reading the text. The following procedure used:

1. Some formula was applied in this research to process the data as follows:

Table.3.2. The Classification of Students' Score on Questionnaire

Score	Criteria
5	The answer the questionnaire is strongly agree
4	The answer the questionnaire is agree
3	The answer the questionnaire is doubt
2	The answer the questionnaire is disagree
1	The answer the questionnaire is strongly disagree

<sup>4</sup>AS Hornby, *Oxford Advanced Learner's Dictionary of Current English*, (New York: Oxford University Press, 1974), p.193.

2. In getting the test score, the researcher used the following formula

$$Score = \frac{Max\ Score}{Min\ Score} \times 100$$

### 3.3 Table classification score

No	Score	Classification
1.	80-100	Very Good
2.	66-79	Good
3.	56-65	Fair
4.	40-55	Poor
5.	≤40	Very Poor <sup>5</sup>

The table above explain that students can be said to get Excellent scores when students are able to get a score of 80-100, students are said to get a Good score when students are able to get a score of 66-79, if students get a score of 56-65 then students are at Fair classification, then if students get Poor classification then the student got a score of 40-55. And if a student gets a score of less than 40 so the student gets a very poor classification.

<sup>5</sup>Suharsimi Arikunto, *Dasar-dasar Evaluasi Pendidikan*, (Jakarta: Bumi Aksara, 2009), p.245.

3. Calculating the mean score by using the following formula:

$$X = \frac{\Sigma x}{N}$$

Where:

X = Mean score

$\Sigma x$  = Total score

N = Total number of Sample<sup>6</sup>

4. Calculating score of students' interest and reading comprehension

This correlation used the correlation Product Moment. The product moment is use to find the correlation and proving the hypothesis to variable. The calculating of the correlation coefficient of the result of both of test was analyzed by applying the formula moment correlation as follow:

$$r_{xy} = \frac{n\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[n\Sigma X^2 - (\Sigma X)^2][n\Sigma Y^2 - (\Sigma Y)^2]}}$$

Where:

$r_{xy}$  = Correlation Coefficient

N = The number of students/subjects participating in the test

$\Sigma x$  = The sum of score of questionnaire

$\Sigma y$  = The sum of score in reading test<sup>7</sup>

Before counting the score of correlation coefficient “r”, first to determine X variable and Y variable. The score of students on questionnaire is called X and the

<sup>6</sup>L.R. Gay, *Education Research (Competencies for Analysis and Application)*, p.298.

<sup>7</sup>Suharsimi Arikunto, *Prosedur Penelitian* (Jakarta: RinekaCipta 2002), p. 146.

score of the students on reading test is  $Y$ . To find out the correlation between  $X$  and  $Y$ , significant or not, use the definition of the refuse or accept hypothesis as follows:

$$H_0 = \text{refuse if } r\text{-value} \leq r\text{-table}$$

$$H_1 = \text{refuse if } r\text{-value} \geq r\text{-table}$$

If there is a relationship between the independent variable and the dependent variable, then it can be said that there is also influence. Next make a simple linear regression equation to find out whether the variable  $X$  has a significant influence on the variable  $Y$ .

Find the value of constant  $b$

$$b = \frac{n \cdot \sum xy - \sum x \cdot \sum y}{n \cdot \sum x^2 - (\sum x)^2}$$

Find the value of constant  $a$

$$a = \frac{\sum y - b \cdot \sum x}{n}$$

Make a regression equation

$$Y = a + b \cdot X$$

The formula above to prove whether the variable  $X$  has a significant influence on variable  $Y$ .

